Attachment "A"

(Amended and Newly Submitted Claims)

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1. (currently amended) A method of processing organic waste ~~(D)~~ in divided solid and/or liquid form~~, the method being implemented~~ in a single reactor ~~(1)~~ containing a bath of molten glass ~~(V)~~ surmounted by a gas phase ~~(G)~~, ~~the method~~ comprising incinerating said waste ~~(D)~~ in ~~the~~ presence of oxygen or oxygen-containing gas acting as an oxidizer at ~~the~~ a surface ~~(S)~~ of said bath ~~of molten glass (V)~~, and ~~in~~ vitrifying said incinerated waste ~~(D)~~ in said bath ~~of molten glass (V)~~, the method being characterized in that:

in addition to the oxygen or the oxygen-containing gas delivered as the oxidizer into said gas phase ~~(G)~~, oxygen or oxygen-containing gas is also injected into said bath by injection means having an open end, ~~of molten glass (V) in a quantity that is sufficient to minimize or to avoid any formation of metal within said bath of glass (V); advantageously in a quantity that is sufficient to minimize or to avoid any formation of metal within said bath of glass (V) and also to subject said bath of glass (V) to moderate stirring; the means (8) used for~~ said injection means being cooled and arranged in such a manner that on ceasing ~~said~~ injection, ~~they~~ said injection means do not ~~constitute~~ form a plug of glass at their open end.

2. (currently amended) The method according to claim 1,

characterized in that said oxygen or oxygen-containing gas injected into said bath of molten glass ~~(V)~~ is introduced into said reactor ~~(1)~~ beneath the surface ~~(S)~~ of said bath ~~of glass (V)~~.

3. (currently amended) The method according to claim 1, ~~characterized in that it is implemented with~~ further comprising cooling ~~of the~~ walls ~~(3, 3')~~ of said reactor ~~(1)~~ and/or ~~of the~~ feeding means ~~(5, 6)~~, other than said injection means, ~~(8) for injecting oxygen or oxygen-containing gas into said bath of glass (V), introduced into said reactor (1) in said gas phase (G) and in said bath of glass (V), in particular for feeding~~ which feed said reactor ~~(1)~~ with said waste ~~(D)~~ and with said oxidizer.

4. (currently amended) The method according to claim 3, ~~characterized in that it is implemented with~~ further comprising dual cooling of the ~~device (5) for feeding~~ feeding means which feed said waste ~~(D)~~ to said reactor ~~(1)~~ wherein:

a first cooling of ~~it's~~ a thickness and of ~~its~~ an outside surface ~~(50),~~ of said feeding means is designed to protect ~~it~~ said feeding means from corrosion; and

a second cooling of ~~its~~ an inside surface ~~(50'),~~ of said feeding means is designed to minimize ~~the~~ heat transfer~~red~~ to ~~the~~ incoming waste ~~(D)~~.

5. (currently amended) The method according to claim 3,

characterized in that said walls ~~(3, 3')~~ of said reactor ~~(1)~~ in contact with said gas phase ~~(G)~~ and/or said feeding means ~~(5, 6)~~ introduced into said reactor ~~(1)~~ in contact with said gas phase ~~(G)~~ are cooled by circulation of at least one cooling fluid maintained at a temperature ~~that is~~ higher than ~~the~~ a dew point temperature of said gas phase ~~(G)~~.

6. (currently amended) The method according to claim 1, characterized in that said bath of molten glass ~~(V)~~ is heated by induction, by flame, by plasma torch, or by means of electrodes dipped therein.

7. (currently amended) The method according to claim 1, characterized in that ~~it~~ said method is implemented in a cold crucible heated by induction.

8. (currently amended) The method according to claim 1, characterized in that ~~it~~ said waste is ~~implemented to process~~ radioactive waste.

9. (currently amended) An apparatus for processing organic waste ~~(D)~~ in divided solid and/or liquid form by incineration and ~~by~~ vitrification, the apparatus comprising a reactor ~~(1)~~ associated with heater means ~~(2)~~ suitable for maintaining a bath of molten glass ~~(V)~~ in ~~the~~ a bottom portion of said reactor ~~(1)~~, and fitted

with:

- means ~~(4)~~ for emptying ~~out~~ said bath of molten glass ~~(V)~~;

- a feeding device ~~(5)~~ for feeding said waste ~~(D)~~ to be incinerated and vitrified, said feeding device ~~(5)~~ having an open end opening ~~out~~ above ~~the~~ a surface ~~(S)~~ of said bath of molten glass ~~(V)~~;

- means ~~(6)~~ for feeding oxygen or oxygen-containing gas, delivering said oxygen or said oxygen-containing gas above the surface ~~(S)~~ of said bath of molten glass ~~(V)~~; and

- at least one combustion gas outlet ~~(7)~~ provided in ~~the~~ a top portion of said reactor ~~(1)~~ well above the surface ~~(S)~~ of said bath of molten glass ~~(V)~~;

the apparatus being characterized in that said reactor ~~(1)~~ is further equipped with injection means ~~(8)~~ having an open end for injecting oxygen or oxygen-containing gas into said bath of molten glass ~~(V)~~; said injection means ~~(8) for injecting said oxygen or said gas into said bath of molten glass (V)~~:

being arranged in such a manner that on ceasing to be fed, ~~they~~ said injection means do not ~~constitute~~ form a plug of glass at their open end; and

~~including~~ having a structure which includes at least one circuit ~~(83 + 83')~~ for circulating a cooling fluid ~~within their structure~~ therein.

10. (currently amended) The apparatus according to claim 9,

characterized in that said injection means ~~(8) for injecting said oxygen or said gas into said bath of glass (V)~~ are introduced into the bottom portion of said reactor ~~(1)~~ beneath the surface ~~(S)~~ of said bath of molten glass ~~(V)~~.

11. (currently amended) The apparatus according to claim 9, characterized in that said injection means ~~(8) for injecting said oxygen or said gas into said bath of glass (V)~~ are disposed vertically, pass~~ing~~ through the bottom portion of said reactor ~~(1)~~ and present~~ing~~ an outlet ~~(82)~~ at 90° to ~~their~~ a vertical axis.

12. (currently amended) The apparatus according to claim 9, characterized in that ~~the means introduced into said reactor (1), other than said means (8) for injecting said oxygen or said gas into said bath of molten glass (V), including~~ said feeding device ~~(5)~~ for feeding said waste ~~(D),~~ and said means ~~(6)~~ for feeding oxygen or oxygen-containing gas have a structure which includes at least one circuit ~~(51, 52; 61)~~ for circulating a cooling fluid ~~within their structure~~ therein.

13. (currently amended) The apparatus according to claim 12, characterized in that the structure of said feeding device ~~(5)~~ for feeding said waste ~~(D) presents a structure that~~ is tubular~~, being~~ and is defined by an outside surface ~~(50)~~ and ~~by~~ an inside surface ~~(50')~~, said structure including in ~~the~~ a thickness thereof at least

two circuits ~~(51 and 52)~~ for circulating cooling fluids, at least one of said two circuits ~~(51)~~ being ~~designed~~ adapted to cool said structure and said outside surface ~~(50)~~ of said ~~feeder~~ feeding device ~~(5)~~, and at least another one of said two circuits ~~(52)~~ being ~~designed~~ adapted to cool said inside surface ~~(50')~~ of said ~~feeder~~ feeding device ~~(5)~~.

14. (currently amended) The apparatus according to claim 9, characterized in that ~~the walls (3, 3') of~~ said reactor ~~(1) are of the~~ has double-walled type walls, to allow a cooling fluid to circulate.

15. (currently amended) The apparatus according to claim 9, characterized in that said reactor ~~(1)~~ is a cold crucible, and ~~in that~~ said heater means ~~(2)~~ are means for induction heating.

16. (new) The method according to claim 1, wherein said oxygen or oxygen-containing gas is injected into said bath of molten glass in sufficient quantity to substantially reduce metal forming within said bath of molten glass.

17. (new) The method according to claim 1, wherein said oxygen or oxygen-containing gas is injected into said bath of molten glass in sufficient quantity to impart moderate stirring to said bath of molten glass.